

Detailed Appraisal									
D5: Targeted Programme of Measures to improve road standards between Glasgow and Oban/Fort William (A82)									
Estimated total Public Sector Funding Requirement:				<i>Capital Costs/grant</i>		£100m - £250m			
				<i>Annual Revenue Support Present</i>		-			
				<i>Value of Cost to Gvt</i>		£50m - £100m			
				<i>BCR/PVB</i>		N/A			
Summary Impact on STAG Criteria	Environment Safety Economy Integration Accessibility and Social Inclusion	---	--	-	0	+	++	+++	
(Judgement based on available information against a 7pt. scale.)									
Intervention Description:									
<p>This intervention supports the objectives to provide a significant improvement in road standard along the A82 and to reduce the accident severity rates on various routes. In addition to a general upgrade of the route, the intervention would include measures such as:</p> <ul style="list-style-type: none"><li>• Carriageway widening at selected locations between Tarbet and Inverarnan;</li><li>• Carriageway widening at selected locations between Corran Ferry and Fort William; and</li><li>• Physical works such as climbing lanes at Loch Tulla, overtaking lay-bys aimed at providing safer overtaking opportunities and improving journey time reliability and safety targeted measures such as hard strips, junction improvements and local realignment.</li></ul> <p>It is envisaged that individual elements would be delivered in a targeted programme to address identified accident clusters and points where the routes have significant constraints on achieving consistent journey times.</p> <p>In addition, speed enforcement measures could be considered at appropriate locations.</p>									
Summary: Rationale for Selection									
<p>This is a key route for tourism and as such has a high proportion of infrequent users; the provision of a consistently high standard of carriageway would be of particular significance to the improvement of road safety.</p> <p>The introduction of physical works to provide safer overtaking opportunities, in conjunction with speed enforcement measures, is expected to improve road safety along the route, and reduce both the accident and fatal accident rates closer to the national levels.</p> <p>The environmental impacts this intervention has on designated sites, valued habitats, protected species and water quality have been identified at the strategic level as part of the Strategic Environmental Assessment and Appropriate Assessment. Appropriate mitigation and avoidance measures have been identified and will be further refined should this intervention be taken forward.</p>									

Table D5.1.1 STPR Objectives

STPR Objectives	
<p><u>STPR Objective 7.1:</u> To provide improved road standards and overtaking opportunities.</p>	<p><b>7.1: Strongly Positive</b> - The proposed junction improvements, realignment interventions and 2+1 provisions would increase the road standards within the corridor. Realignment and 2+1 sections would also allow safer overtaking opportunities which could reduce the number of severe accidents occurring at these locations.</p>
<p><u>STPR Objective 7.2:</u> To reduce accident severity to the national average.</p>	<p><b>7.2: Strongly Positive</b> - The A82 is single carriageway with a number of sections with poor road alignment, and limited overtaking opportunities. Combined with vehicle 'bunching' behind slow moving HGVs (10 per cent of traffic is HGV on A82), coaches or tourist traffic, this can increase driver frustration, and in turn, the likelihood that drivers may make dangerous overtaking manoeuvres. The proposals would increase the safety within the corridor. Improved junction access to the trunk road network could reduce the likelihood of accidents occurring, thus reducing the accident rate on the route. Realignment and 2+1 sections would also allow safer overtaking opportunities thus reducing the likelihood of severe accidents occurring at these locations. Speed enforcement measures would reduce the number of accidents where speeding is identified as a causation factor. This would reduce accident rates and severe accident rates on the A82.</p>

Table D5.1.2 STAG Criteria

STAG Criteria		
Criteria:	Assessment Summary:	Supporting Information:
Environment:	Minor/Moderate Negative impact	This intervention has the potential for impacts on biodiversity, water, geology / soils, landscape and cultural heritage, particularly where any widening of the carriageway is undertaken. There are a number of Special Areas of Conservation and one Special Protection Area in the vicinity of the road so there is potential for impacts on designated biodiversity sites. Improvements to the A82 could affect the grade A classified Loch Lomond, Loch Tulla, Loch Lubnaig and Rivers Tay and Teith although this depends on the specific location and extent of the enhancements.
Safety:	Major Benefit	The existing accident rate on the Glasgow to Fort William section of the A82 is 22.9 Personal Injury Accidents per 100 million vehicle kilometres (P.I.A./100MVkm), which is higher than the national rate of 15.5 P.I.A./100MVkm. This rate is expected to decrease as the road is improved to allow safer overtaking, and also reducing the number of speeding vehicles on certain sections of the route. National statistics indicate that the difference in accident rates between the UK national rate for rural single carriageway roads and rural single carriageway roads with climbing lanes is a reduction of up to 50 per cent. The fatal accident rate on this same section of the A82 is 3.8 fatal accidents per 100MVkm compared against the national rate of 0.76 fatal accidents per 100MVkm. This is expected to reduce due to both the infrastructure improvements and the reduction of speeding vehicles. A number of accident clusters were identified on straight sections of the road; however by introducing speed enforcement measures on these sections, it is expected that the number of speed related accidents would reduce. Accident clusters were also identified on bends, therefore alignment improvements and widening proposals, in addition to 2+1 sections on the A82 would provide safer overtaking opportunities, which may contribute to improved safety on this section.
Economy:	Moderate Benefit	<p><b>Transport Economic Efficiency (TEE):</b> Around 38 per cent of trips on the corridor have an origin or destination in Glasgow, highlighting the importance of providing a safe and reliable road network to one of Scotland's main economic centres. Route improvements would result in a degree of travel time savings, which would benefit all road users including public transport and freight vehicles. Introduction of speed enforcement measures, at targeted safety locations, would result in economic savings in terms of accident benefits.</p> <p><b>Wider Economic Benefits (WEBs):</b> Improvements would result in more consistent and reliable journey times. This corridor is a key tourist route therefore safety improvements would benefit a wide range of users. The intervention would contribute to wider economic benefits for businesses along the corridor and in providing improved links between Fort William and the Central Belt.</p> <p><b>Economic Activity and Location Impacts (EALIs):</b> The proposals would support the general drive to improve safety on the trunk road network, and improve the attractiveness of the A82.</p>
Integration:	Minor Benefit	<p><b>Transport Integration:</b> This package would have no significant effect on public transport integration and ticketing.</p> <p><b>Transport and Land Use Integration:</b> This package would not affect the need to travel. Improvements to strategic journey times on the A82 would assist in the development of Fort William, with improved connections between the town and the Central Belt. Studies have indicated that local businesses along the route believe that improvements would have a positive impact on business investment, including attracting new business to the area, particularly in the retail and tourism sectors.</p> <p><b>Policy Integration:</b> This package may improve connections between the rural communities along this corridor, thus affecting rural affairs.</p>

<b>Accessibility and Social Inclusion:</b>	<b>Moderate Benefit</b>	<p><b>Community Accessibility:</b> The proposals would improve accessibility on the route as it could include junction improvements which would provide easier access to the A82. End to end trips between the Central Belt and the more remote areas, such as the Western Isles would also be improved due to journey time and reliability improvements on the route.</p> <p><b>Comparative Accessibility:</b> This intervention would not impact on comparative accessibility.</p>
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Table D5.1.3 Key Strategic Outcomes

Key Strategic Outcomes (KSO's)		
Objective:	Assessment Summary:	Supporting Information:
<b>Improve Journey Times and Connections:</b>	<b>Minor Benefit</b>	Construction of climbing lane sections would provide safer overtaking opportunities of slower moving vehicles, and other improvements to the A82 would result in journey time improvements. Connections with other modes of travel in the corridor would improve as a result.
<b>Reduce Emissions:</b>	<b>Neutral</b>	This intervention would not have a significant impact on emissions.
<b>Improve Quality, Accessibility and Affordability:</b>	<b>Major Benefit</b>	The proposals would increase the quality of road standard at a number of locations along the route. Proposed 2+1 sections would allow more safe overtaking opportunities which would lead to a reduction in driver frustration. Accessibility would be improved as rural communities within the corridor would have improved access to the trunk road network. This intervention would not impact on affordability.

Table D5.1.4 Scottish Government's Strategic Objectives

Scottish Government's Strategic Objectives		
Objective:	Assessment Summary:	Supporting Information:
<b>Safer and Stronger:</b>	<b>Moderate Benefit</b>	The widened, realigned and 2+1 sections of road would lead to improvements in road safety as the expected accident rates for these types of road are lower than for a rural single carriageway road. A reduction in speeding vehicles would also reduce the severity of accidents on the improved sections. It would not affect the quality, accessibility and affordability of public transport.
<b>Smarter:</b>	<b>Neutral</b>	This intervention would have no significant impact on access to schools, colleges and universities for those living along the corridor.
<b>Wealthier and Fairer:</b>	<b>Minor Benefit</b>	A degree of journey time savings would occur due to improved road standards. Delays caused by accidents on the route may be reduced, leading to more efficient transfer of goods on the network.
<b>Greener:</b>	<b>Neutral</b>	The proposals would have a minor impact on emissions as traffic speeds would be more stable, with less speeding vehicles; however the improvements would not result in any significant shift from car to public transport.
<b>Healthier:</b>	<b>Neutral</b>	This intervention would not have any impact on promoting healthier forms of transport or access to health services.

Table D5.1.5 Implementability Appraisal

Implementability Appraisal	
<b>Technical:</b>	No major technical issues are anticipated to arise from this intervention; however design would have to account for conditions along the corridor including terrain and land issues. Ensuring speed enforcement measures do not affect the visual impact of the area would be an issue. This is particularly important as tourism plays a key role in travel on this corridor.
<b>Operational:</b>	This intervention is considered to be operationally feasible. Although there would be operational issues during construction, there are not expected to be further issues following the completion of the works.
<b>Public:</b>	It is considered that the improvements would be welcomed by regular road users in this area as there has been a significant level of public interest in improvements on the A82 for some time.